



Cherwell District Council improves police response with enhanced CCTV facilities



Customer agenda

- Continuous Improvement/Innovation
- Risk Avoidance

Services

- Video Collaboration
- Product Fulfilment Service

Technology

Software:

Synectics CCTV control system,
Synergy PRO controller

Hardware:

NEC LCD large-format monitors, TFT
touch-screen monitors, IBM servers

Customer challenge

Cherwell District Council works in partnership with Thames Valley Police to reduce crime in North Oxfordshire. The force reviews footage from 50 CCTV cameras around Banbury, Bicester and Kidlington via a central control room. With the existing CCTV control room system adding both cost and complexity to the judicial process, Thames Valley Police needed a new solution.

Computacenter solution

The council partnered with Computacenter to design and implement a CCTV control and recording system with a robust network backbone. Based on Synectics technology, the solution includes high-quality digital recording facilities, storage capacity for 30 days of footage and a video wall capable of displaying images from all 50 cameras simultaneously.

Results

The new control room system provides better visibility of incidents in real time. Instead of waiting two hours to review CCTV footage, Thames Valley Police now have instant playback facilities, which aids both crime prevention and detection. Evidence needed to support criminal investigations can also be sourced more quickly, which means officers can spend more time in the community.

“The new CCTV system enables Thames Valley Police to provide a better response to incidents in the Cherwell area.”

Stuart Hemming
Technical Project Manager
Cherwell District Council

Customer profile

Reducing crime in North Oxfordshire

From refuse collection and housing to planning and leisure facilities. Cherwell District Council provides a range of local services to the 140,000 people living and working in North Oxfordshire.

The council works closely with Thames Valley Police as part of the Cherwell Safer Communities Partnership, which is designed to cut crime by focusing on intervention, enforcement and re-offending.

Thames Valley Police is one of the largest forces in Britain, covering Berkshire, Buckinghamshire and Oxfordshire and employing more than 7,500 people. It deals with around 15,000 crimes throughout the area every month.

The British Crime Survey shows that there has been a reduction of almost 10 per cent in overall crime in Cherwell since 2004.

Business challenge

Enhancing CCTV control for crime detection and prevention

CCTV is one of the key areas in which Cherwell District Council works closely with Thames Valley Police.

To help detect and prevent crime and anti-social behaviour in the district's three main urban areas, Thames Valley Police force monitors real-time footage from 50 CCTV cameras.

Superintendent Howard Stone, MBA MRIN, Cherwell Local Police Area (LPA), Thames Valley Police, comments: “CCTV is an essential tool which can be used to both prevent and detect crime. The deployment of CCTV cameras in strategic locations provides reassurance, is a deterrent and can help in identifying those responsible for committing crime. The use of CCTV across the Cherwell District has undoubtedly contributed to the 10 per cent reduction in overall crime in Cherwell since 2004.”

The images captured by the cameras in Banbury, Bicester and Kidlington are reviewed at a central control room at Banbury Police Station. Incidents are then reported to Thames Valley Police's command centre or ambulance and fire services to deploy resources as needed.

Stuart Hemming, Technical Project Manager for Information Services at Cherwell District Council, comments: “Police officers also provide real-time updates from the CCTV control room to command centres during major incidents, such as building evacuations or road traffic accidents, to ensure resources are directed to the right location.”

However, the existing CCTV control system at Banbury Police Station - which is provided by the council - was reaching end of life. This not only resulted in a greater volume of faults - which were expensive and time-consuming to fix - but also made it harder for the council to buy parts to expand and maintain the system.

Stuart comments: "As well as issues around reliability and scalability, the system was based on VHS video tape, which caused a number of complications. For example, to playback footage recording had to be stopped and the tape removed. Also, tapes had to be changed every 12 hours and sourcing evidence to support interviews or for court proceedings was particularly labour-intensive."

To make more effective use of CCTV as part of the judicial process, the council needed to provide Thames Valley Police with a new control system and underlying infrastructure that would offer greater reliability and support digital data management.

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Stuart Hemming,
Technical Project Manager
Cherwell District Council

IT solution

Improved CCTV functionality and data management

To find the right solution and partner, Cherwell District Council ran a competitive tender via an Office of Government Commerce (OGC) procurement framework. Stuart comments: "Computacenter scored highest out of all the submitted bids on three main factors: cost, compliance with functional specification and implementation plan."

Computacenter's solution is based on a Synectics CCTV control system. The main functional requirements included:

- A digital recording system that offers minimum quality of 25 frames per second
- Enough storage space to retain footage for 30 days
- A video wall capable of displaying footage from all 50 cameras simultaneously
- Ability to replay footage instantly without disrupting recording process

The solution converts analogue camera input to a digital signal so images can be stored on a digital storage array, which is based on IBM servers and housed in a server room adjacent to the CCTV control room. "Images are configured over a local area network (LAN) and fed to a dedicated control unit for display on a new eight-screen video wall in the control room," explains Stuart.

The angle of the CCTV cameras can be remotely adjusted using a special keyboard and joystick, which form part of the overall operator console. The console also includes four touch-screen monitors, which display real-time alerts and system administration messages, as well as live CCTV images.

Computacenter also helped to establish and equip a dedicated review suite, from which Thames Valley Police officers can independently replay stored images to assist with ongoing investigations. "Incident management software has been integrated with the system so officers can log incidents, attach video footage, link still images and allocate crime details," adds Stuart.

Computacenter designed the network and cabling infrastructure that connects the CCTV control room, review suite and server room, which was implemented by Thames Valley Police and its partners. Stuart comments: "With more than 3.2 terabytes of data being fed to the control room from cameras each day and a 30-day retention period, a reliable backbone was essential to the success of the solution."

Results

Better visibility of incidents and faster access to evidence

The project was completed on time and to budget in June 2010, but most importantly with minimum disruption. "It was vital that CCTV was offline for as short a time as possible," comments Stuart. "Computacenter's implementation plan included establishing a temporary site from which to monitor CCTV footage while the new solution was installed. As a result, there was less than a day's downtime throughout the three-month project."

Working with Computacenter also helped to simplify project delivery for the council. "Although there were five different contractors involved, Computacenter was our single point of contact," comments Stuart. "This meant, we only had to communicate with Computacenter to discuss any challenges and ensure timelines were met."

Since the new CCTV control system went live, Thames Valley Police has benefited from:

Greater visibility of real-time incidents: The system is easier to control and provides better image quality, which officers can identify vehicle number plates and people more easily.

More informed decision-making: The force can review footage immediately – compared to up to two hours previously – without disrupting recording. This enables control room staff to provide the Thames Valley Police command centre and other emergency services organisations with more information faster.

Greater efficiency: The new solution is more reliable and easier to manage, as tapes no longer have to be changed every 12 hours. Officers can also gather evidence more quickly and easily, which means they can spend more time, actively combating crime in the community.

Superintendent Stone comments: "Making our communities a safer place to live remains a priority and an upgraded CCTV facility with enhanced capability will be a major factor in delivering this objective. The improved system offers a number of benefits including improved image quality, fast time review of incidents without disruption to recording and the ability to search for incidents on recorded footage more efficiently. This improved functionality and more efficient data management will mean that CCTV remains an important tool in the fight against crime and anti-social behaviour in Cherwell."

The second phase of the project, which involves digitalising the cameras and transmission network, is due to commence next financial year.

"The new CCTV system enables Thames Valley Police to provide a better response to incidents in the Cherwell area and make better use of its frontline resources," comments Stuart.

More resources

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